Before You Begin

1. Be sure to read the manual thoroughly before beginning the installation to ensure a proper understanding of the CS105 and its functions.
2. Verify system contents:
   - ❑ Main Unit
   - ❑ Two 2-Button Remote Transmitters
   - ❑ Harnesses
     - 14-Pin main harness
     - 2-Pin Status LED harness
     - 2-Pin Override Switch harness
     - 3-Pin Door Lock harness
3. Discuss the location of the status LED and the Emergency Override Switch with the vehicle's owner.
4. Discuss with the vehicle's owner the optional features of the CS105 and the features that must be programmed during installation.
5. Check all of the vehicle's operating systems before and after the installation.

Mounting Components

Main Unit

The main unit should be mounted in the interior of the vehicle. *Do not* mount the main unit in the engine compartment.

If you are mounting the unit under the dash board, be sure to mount the unit as high as possible and in a location where it will not interfere with the operation of the pedals.

Be sure to extend the antenna as high as possible so that optimum range can be achieved.

Before securing the unit, be sure that you have made all of the necessary jumper selections and perform a thorough function test of the system.

The case of the CS105 is designed to be mounted using screws, or secured using wire ties through the wire tie mounting tabs located on the unit.

Override Switch

Mount the Override Switch in a location near the driver where it is easily accessible but not plainly visible. Plug the blue override switch connector into the blue 2-pin socket on the main unit.

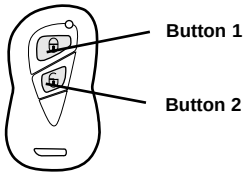
Be sure that the switch cannot accidentally be pressed or damaged by movement of passengers or contents within the vehicle.

LED Status Indicator

Mount the status LED so that it is visible from both sides of the vehicle. Plug the white LED connector into white 2-pin socket on the Main Unit.

Remote Transmitters

Remote Transmitter Layout



Transmitter Operating Modes

The CS105 can be configured to work with the remote transmitters in one of three ways, Convenience Mode (default), Standard Mode, or Driver Door Priority Mode. To select or change the transmitter operating mode, see ***Programming***.

Convenience Mode

This mode will configure the system to Lock and Unlock on separate button for convenience and ease of use.

Button 1 Locks the system.
Button 2 Unlocks the system *and* controls the system's Auxiliary Function.

If the system is Armed, pressing Button 2 Unlocks the system.
If the system is Unlocked, pressing Button 2 activates the Auxiliary Function.

When Buttons 1 and 2 are pressed *together*, the systems Chirp confirmation setting will be reversed.

If the system was programmed to lock the system *with* chirp, Pressing Buttons 1 and 2 together will lock the system *without* chirp.

If the system was programmed to lock the system *without* chirp, pressing Buttons 1 and 2 together will lock the system *with* chirp.

Standard Mode

Button 1 Locks and Unlocks the system.
Button 2 Controls the system's Auxiliary Function.

When Buttons 1 and 2 are pressed *together*, the systems Chirp confirmation setting will be reversed.

If the system was programmed to lock the system *with* chirp, Pressing Buttons 1 and 2 together will lock the system *without* chirp.

If the system was programmed to lock the system *without* chirp, pressing Buttons 1 and 2 together will lock the system *with* chirp.

Driver Door Priority Mode

This mode operates in a similar manner as the *Convenience Mode*, with the added safety of unlocking just the driver's door when the system is unlocked. Pressing Button 2 again will unlock the remaining doors.

To properly utilize the Driver Door Priority Mode, the system must be wired so that the Auxiliary Function output is wired to a relay that controls the drivers door lock actuator. See ***Driver Door Priority Wiring Diagrams.***

Button 1 Locks the system.
Button 2 Unlocks the system *and* controls the system's Auxiliary Function.

If the system is Locked, pressing Button 2 Unlocks the system.

If the system is Unlocked, pressing Button 2 within 15 seconds unlocks the passenger doors.

When Buttons 1 and 2 are pressed *together*, the systems Chirp confirmation setting will be reversed.

If the system was programmed to lock the system *with* chirp, Pressing Buttons 1 and 2 together will lock the system *without* chirp.

If the system was programmed to lock the system *without* chirp, pressing Buttons 1 and 2 together will lock the system *with* chirp.

Programming Jumpers

Parking Light Polarity. Selects the polarity (+/-) for the output of the on-board Parking Light relay.

Pin 1 + Pin 2 = negative
Pin 2 + Pin 3 = positive (default)

Dome Light Polarity. Selects the polarity (+/-) for the output of the on-board Illuminated Entry/Exit relay.

Pin 1 + Pin 2 = negative (default)
Pin 2 + Pin 3 = positive

Horn Honk / Siren Output. Selects the polarity (+/-) and function for the output of the Orange wire.

Pin 1 + Pin 2 = Siren (+) output
Pin 2 + Pin 3 = Horn (-) output (default)

Siren - When the Panic function is triggered, the output will be *constant.*
Horn - When the Panic function is triggered, the output will be *pulsing.*

Door Lock Pulse Length. Selects between a 1-second and a 4-second output for door locking and unlocking. Set to *4 seconds* when interfacing into vehicles equipped with vacuum door locking systems.

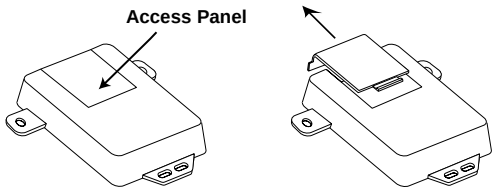
On = 4 seconds
Off = 1 second (default)

Comfort Closure. Sets the system to provide a 40 second output on the door lock wire (White/green (-) or White/blue (+12v)) when the system is Locked to activate the Comfort Closure feature found on many late model European vehicles. Vehicles equipped with this feature will normally close the windows and sunroof automatically when the door key is held to the lock position.

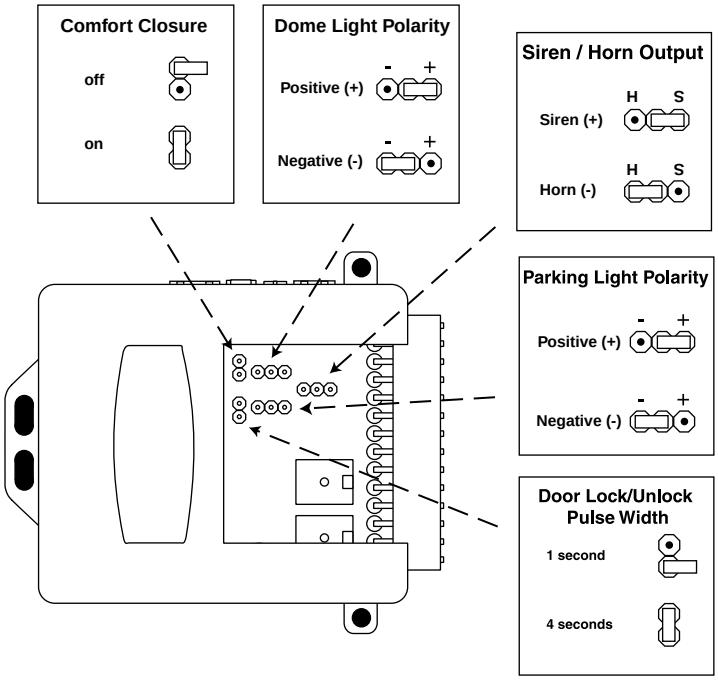
Accessing the Jumpers

Carefully press in on the access panel and slide it forward toward the end of the case.

Once you have made your selections, close the case by sliding the panel back into place.



Setting the Jumpers



Programming

System Initialization and Default Reset

Following this procedure will set all System Programming Parameters to factory default settings.

1. Turn on ignition.
2. After 4 seconds, press and hold Buttons 1 and 2 together for 5 seconds. The siren will emit one chirp, indicating that the reset signal was received.
3. Turn ignition off.
   - All System Programming parameters are now set to factory default settings.

Entering System Programming

1. Turn the ignition on.
2. Within 4 seconds, press Transmitter Button 2.
   - The siren will emit one short chirp, indicating that you have entered Programming Step 1.
   - The Status LED will show the current setting of Step 1 (solid or flashing).
3. You can now make changes to the Programmable System Parameters.

   Press Button 1 to change the setting.
   Press Button 2 to move to the next step.
4. When you are finished, turn the ignition off to save your changes. You can turn the ignition off at any time during Programming. When the ignition is turned off, the changes that you have made will be saved.

Programmable System Parameters

Button 2 ↓	Step	Function	Status LED / Button 1 → Solid*	Flashing (quickly)	Flashing (slowly)
	1	Ignition Controlled Door Locking	ON	OFF	
	2	Ignition Controlled Door Unlocking	ON	OFF	
	3	Illuminated Exit	ON	OFF	
	4	Door Unlock Pulse	single	double	
	5	Auxiliary Function output	momentary	latched	30 seconds
	6	Transmitter Operating Mode	Convenience	Standard	Driver Door Priority

* default setting

1. **Ignition Controlled Door Locking.** When selected, the doors will automatically lock 10 seconds after the ignition key is turned on.

   To prevent the keys from being locked inside the vehicle when Ignition Controlled Door Locking is on:

   - The system will not lock the doors if any door is open when the ignition is turned on.
   - The system will not lock the doors if any door is opened during the 10 second countdown.

2. **Ignition Controlled Door Unlocking.** When selected, the doors will automatically unlock when the ignition key is turned off.

3. **Illuminated Exit.** When selected, the vehicle's dome light will illuminate for 15 seconds when the ignition is turned off.

4. **Door Unlock Pulse - Single/Double.** Selects between a *single* pulse or a *double* pulse door unlock output.

   On many late model Nissan vehicles, as well as some European makes, the factory door locking system requires two pulses on the proper wire to unlock the vehicle's doors.

   Programming the system for Double Pulse Door Unlocking allow these systems to be interfaced directly *without* the use of relays or any additional circuitry.

5. **Auxiliary Function - Momentary / Latched / Timed Operation. (resets with Lock and Unlock)** Selects between Momentary, Latched, or Timed output for the Auxiliary Function.

   When ***Momentary*** operation is selected, the system will provide an output for as long as the Transmitter button is held.

   When ***Latched*** operation is selected, the system will provide an output that turns on when the transmitter button is pressed and turns off when the transmitter button is pressed again.

   When ***Timed*** operation is selected, the system will provide an output that turns on for 30 seconds each time the transmitter button is pressed. If the button is pressed again during the 30 seconds, the output will turn off.

   When the Latched or Timed outputs are activated:

   - Locking the system will turn **off** the Aux. 2 output if it was turned **on** while the system was unlocked.
   - Unlocking the system will turn **off** the Aux. 2 output if it was turned **on** while the system was locked.

6. **Transmitter Operation.** Configures the system's Remote Transmitters to work in one of three operating modes: Convenience Mode, Standard Mode, and Driver Door Priority Mode. ***See Remote Transmitters - Transmitter Operating Modes.***

Wiring Description

14-Pin Main Harness

Pin 1 - BLACK: Ground.
Connect to a solid chassis ground.

Pin 2 - RED: Main Power (+12v) input [10A fuse]
Connect to constant +12v.

Pin 3 - VIOLET: Ignition input (+12v) input.
Connect to a source that maintains +12v when the ignition key is in both the "on" and "start" positions.

Pin 4 - BLACK/white: Door Pin input / Dome Light Control (+/-) output [on-board relay, 5A Fuse]
Provides either a positive (+12v) or negative (-) output to turn on the vehicle's dome light. Connect this wire directly to the door switch circuit. Be sure to set the polarity of this output. See ***Jumper Settings.***

Note: This wire must be connected to the door pin when using the Ignition controlled Door Locking function or the keys could accidentally become locked inside the vehicle.

Pin 5 - **not used**

Pin 6 - **not used**

Pin 7 - **not used**

Pin 8 - ORANGE: Horn (-) output / Siren (+12v) output
Provides +12v to drive the siren or a negative output to honk the vehicle horn.

Horn. Connect to a relay to honk the vehicle horn. Set the Siren/Horn Jumper for *Horn.**

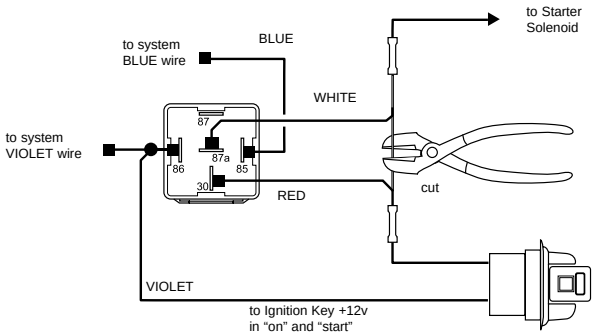
Siren. Connect to the siren positive input wire. Connect the siren negative wire to chassis ground. Set the Siren/Horn Jumper for *Siren.**

*The default setting of the Jumper is ***Horn***, for siren operation, be sure to change the position of the Jumper to *Siren.* See ***Jumper Settings.***

Pin 9 - **not used**

Pin 10 - **not used**

Pin 11 - BLUE: Starter Defeat Normally Closed (-) output
Provides a negative output while the system is Locked and during Panic to disable the vehicle's starter circuits. Connect to the provided Starter Kill Relay socket as shown.



Pin 12 - **not used**

Pin 13 - RED/yellow: Parking Light (+/-) output [on-board relay, 7.5A Fuse]
Provides +12v or ground (-) to flash the parking lights. See ***Jumper Settings*** to select polarity.

Do not connect this wire to parking light circuits that exceed 10 amps. For vehicles with independent left and right parking light circuits, the parking light wires must be connected using diodes to keep the circuits separate.

Pin 14 - YELLOW/white: Auxiliary Function
Provides a negative output to activate a relay. This output may be used for either Auxiliary Function or Driver Door Priority output.

Driver Door Priority. Operates a relay that unlocks only the driver door actuator when the system is configured for Drivers Door Priority mode. See ***Driver Door Priority Wiring Diagrams***.

Aux. Function. Provides negative (-) output. This wire can be programmed to operate in one of three operating modes. See ***Programming***.

Momentary - provides output for as long as the transmitter button is pressed.

Latched - provides an output that stays active until the transmitter button is pressed again.

Timed - provides an output that stays active for 30 seconds when the transmitter button is pressed. If pressed again during the 30 seconds, the output will turn off.

Possible uses of the latched and timed outputs include: audio system valet, auxiliary lighting control, timed headlight operation, etc.

*See ***Programming***.

3-Pin Door Lock Harness

Pin 1 - WHITE/green: Door Lock (-) / Door Unlock (+)
Pin 2 - **not used**
Pin 3 - WHITE/blue: Door Unlock (-) / Door Lock (+)

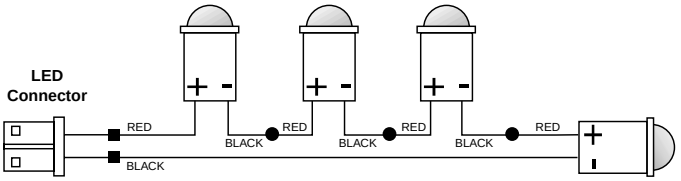
These wires can be directly connected to negative and positive triggered door lock systems. For Voltage Reversal systems and After-market actuators, add relays. See ***Door Lock Diagrams***. For selection of Double Pulse output, Comfort Closure, and 4-second pulse, see ***Programming*** and ***Jumper Settings***.

Other Harnesses

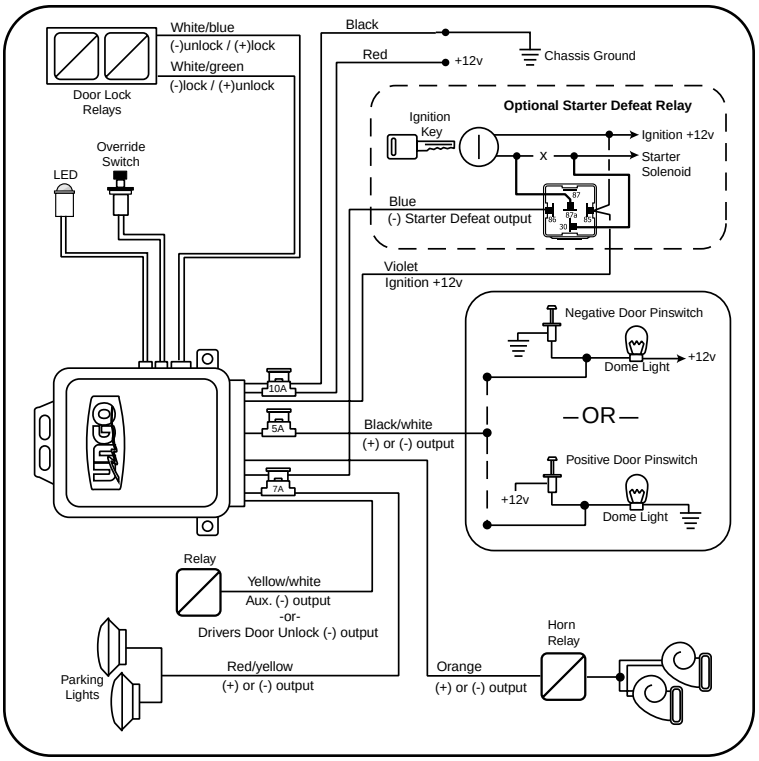
For details on the Status LED and Override Switch, see ***Mounting Components***.

Extra LEDs

Up to 3 extra LEDs can be added. Cut the Red LED wire and connect in series as shown.

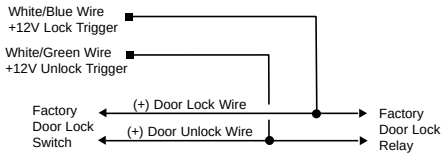


Wiring Diagram

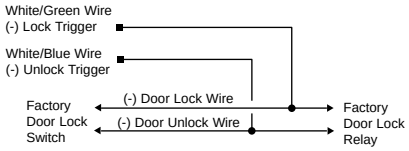


Door Lock Diagrams

Positive Trigger System

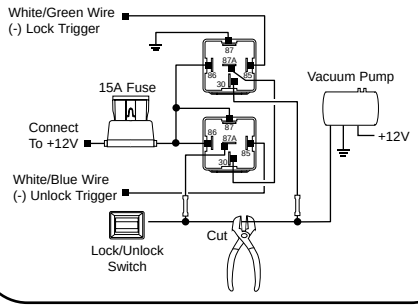


Negative Trigger System

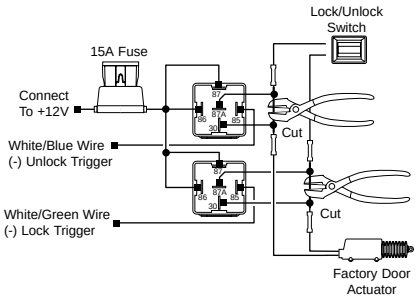


White/green = (-) Lock / +12v Unlock
White/blue = +12v Lock / (-) Unlock

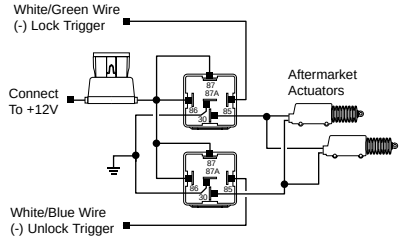
Vacuum Lock System



Voltage Reversal System



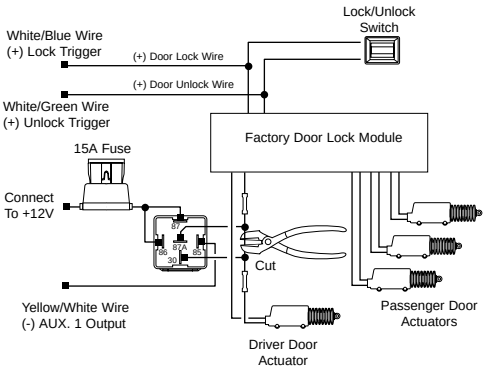
Aftermarket Actuators



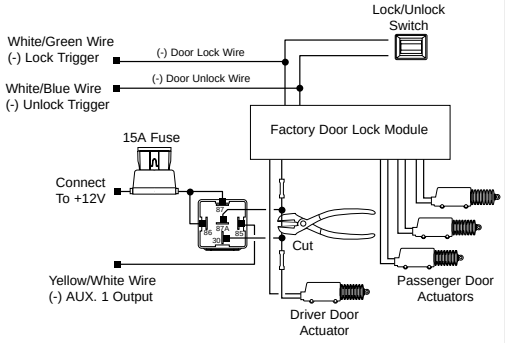
Driver Door Priority Wiring Diagrams

For a description of Driver Door Priority Mode, see ***Remote Transmitters-*** *Transmitter Operating Modes.*

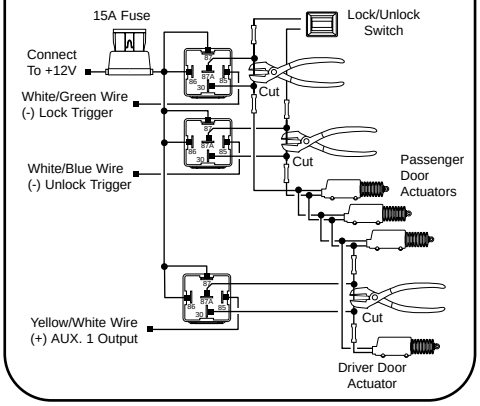
Positive Trigger System



Negative Trigger System



Voltage Reversal System - or - Aftermarket Actuators



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